

Date: Wed, 26 Jan 94 10:07:03 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V94 #77
To: Info-Hams

Info-Hams Digest Wed, 26 Jan 94 Volume 94 : Issue 77

Today's Topics:

Collins Tubesters?
Computing antenna coverage
 cw test
 Engine Noise
FCC RF Spectrum Allocation?
 Icom tuning dial
IOTA frequencies wanted
 Jesus Freqs!
 Kenwood radio software
Novice/Tech test maker?
RAMSEY FX TRANSCEIVER

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Wed, 26 Jan 1994 05:36:03 GMT
From: newshub.nosc.mil!crash!nctams1!pnet16!tjenkins@network.ucsd.edu
Subject: Collins Tubesters?
To: info-hams@ucsd.edu

Anyone know where I can get a line on the solid state Tubesters for the
Collins 32/75 line? Thanks in advance.

--Tom

UUCP: nctams1.navy.mil!pnet16!tjenkins
INET: tjenkins@pnet16.cts.com

Date: 25 Jan 1994 22:01:01 GMT
From: news.cstar.andersen.com!news.acns.nwu.edu!casbah.acns.nwu.edu!
rdewan@uunet.uu.net
Subject: Computing antenna coverage
To: info-hams@ucsd.edu

In article <CK7B0q.JH3@world.std.com>,
Matthew B Cravit <cravit@world.std.com> wrote:
>A friend of mine asked me this question, and I do not know the answer.
>If one has an antenna (say a vertical or something, as opposed to a
>beam) that is x feet above ground level, how does one compute the
>approximate coverage area of that antenna (in square miles)? For
>example, see the following diagram

>
> | |
> | |
> | |
> | _ |
> | x | |
> | | |
> | | | Tower
> | | |
> | | |
> | | |
> -----Ground-----
>

>If we assume that the distance x is, say, 200 feet and that the ground
>around the antenna is relatively flat, is there a way to estimate the
>area of coverage for that antenna?

Approximately, for Line-of-Sight propagation:

$d = \sqrt{2h}$

where d is the maximum distance (radius if the area is flat) in miles

h is the height above average terrain in feet.

Rajiv
aa9ch
r-dewan@nwu.edu

Date: Mon, 24 Jan 1994 16:10:37 CST
From: ucsnews!sol.ctr.columbia.edu!howland.reston.ans.net!vixen.cso.uiuc.edu!
news.eecs.uic.edu!uicvm.uic.edu!u12566@network.ucsd.edu
Subject: cw test

I recall seeing that there is a Gopher site somewhere that is

experimentally offering access to at least some portions of CFR, but unfortunately I don't have the reference handy at the moment.

Good luck.

--

Bob Keller (KY3R) rjk@telcomlaw.win.net Tel 301.229.5208 Fax 301.229.6875

Date: Mon, 24 Jan 1994 13:34:04 GMT

From: agate!howland.reston.ans.net!pipex!sunic!psinntp!psinntp!laidbak!tellab5!
jwa@network.ucsd.edu

Subject: Icom tuning dial

To: info-hams@ucsd.edu

I purchased an Icom 745 about two weeks ago.
After connecting it to my Kenwood PS-50 power supply (they are compatable), I noticed, that the VFO dial only tuned the radio about 100 Hz per 5 revolutions when the TS button was in.

My Icom R71 moved about 10 kHz per revolution.
I came to the conclusion that there was something wrong with the rotary sensor unit.

Icom radios use a rotary sensor to detect the rotation of the tuning knob. The sensor is a phonolic board that has switch contacts plated on the surface. It also has a rotor with a metal wiper.

The wiper is made up of very fine wires that are smaller than human hairs. The rotor moves along three plated switch tracks on a phonolic board. One track is a common ring that connects to the center solder tab on the board. The inner and outer tracks have alternating squares and connect to the outer pins. When the wiper moves along the tracks it makes and brakes the connection between the inner and outer rings. The middle ring connects to the + 5 volt supply.

I called Icom and the replacement cost \$50.00!! I decided it would be cheaper to repair the part. Also, in order to change it, the front panel will have to be removed.

I tried contact cleaner and WD-40 but it didn't work. The part is simply worn out. After connecting a scope to the outer contacts I noticed that there was a considerable amount of contact bounce.

The outer pins of the rotary dial is connected to the micro-

processor and the inner pin connects to +5 volts. The contact bounce is probably confusing the uP. I connected a .001 capacitor to each outer lead and the other end of each capacitor to the inner lead. The bounce was cleaned up and tuning knob works fine!

I saved my self \$50.00 and the aggravation of removing the radio's front panel. I'm shure, sooner or later, it will ware out completely but I did buy some time.

Jack Albert WA9FVP	Fellow Radio Hacker
Tele (708) 378-6201	
Tellabs Operations, Inc.	FAX (708) 378-4590
1000 Remington Blvd.	jwa@tellabs.com
Bolingbrook, IL 60440	

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THE BOWTIE FILTER
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Date: Sun, 23 Jan 1994 03:26:59 GMT
From: qualcomm.com!vixen.cso.uiuc.edu!howland.reston.ans.net!news.intercon.com!
psinntp!gdstech!gdstech!bat@network.ucsd.edu
Subject: IOTA frequencies wanted
To: info-hams@ucsd.edu

The IOTA (Islands On The Air) stations try to congregate on these frequencies: 14.260, 21.260, 28.460. But, when there is already traffic there, they would move up or down. So, tune around that area. I don't know the 40 and 80 IOTA frequencies. -pat

--

* Pat Masterson D12-25 KE2LJ@KC2FD *
* Grumman Data Systems 516-346-6316. *
* Bethpage, NY 11746 bat@gdstech.grumman.com *

Date: Sun, 23 Jan 1994 03:18:06 GMT
From: qualcomm.com!vixen.cso.uiuc.edu!howland.reston.ans.net!news.intercon.com!

psinntp!gdstech!gdstech!bat@network.ucsd.edu
Subject: Jesus Freqs!
To: info-hams@ucsd.edu

Walt, I agree with you 100%. This stuff shouldnt appear in every newsgroup on the net. But, let's not fall into the trap of thinking that the mutant who made the post is actually going to come back here and read your replies. He's already gotten yelled at by his sysadmin, and hundreds (perhaps thousands) of direct emails from his furious fans. Let's move on to more important issues. Can a nocoder take his HT on an airplane if the battery was left on a concrete floor?

--

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*-----*
*   Pat Masterson   D12-25   | KE2LJ@KC2FD           *
*   Grumman Data Systems | 516-346-6316.         *
*   Bethpage, NY 11746   | bat@gdstech.grumman.com    *
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Date: 22 Jan 94 16:59:58 -0600
From: ddsww1!chigate!radiohobby!darren.leno@uunet.uu.net
Subject: Kenwood radio software
To: info-hams@ucsd.edu

The following Kenwood files are available on RADIO HOBBY ONLINE bbs at 708-238-1901, 14,400 v32bis-300 baud. Full dl access to 1st time callers.

3RD.ZIP Kenwood TS-440 control pgm. Will opr w/TNC
440_4.ZIP Kenwood TS-440 Control Program
44SPL101.ZIP TS-400 Control Program, with search ability
4MS200.ZIP Tandy 100 controls Kenwood TS-440S
680MODS.TXT
680MODS.ZIP Kenwood TS-680 Mod
732INFO.ZIP Mods for the Kenwood TM-732a
940SET.ARJ Changes forwarding frequency under computer control in HF
 RLI-BBS network. Choose any frequency for forwarding. For TS-
 940 or TS-790. Sup
94SP0IL.ZIP Control program for Kenwood TS-940S
ALLBULL.ZIP All Kenwood service bulletins
KEN450.ZIP Complete computer control of TS-450
KEN790.ZIP Complete computer control of TS-790
KEN850.ZIP Complete computer control of TS-850
KEN950.ZIP Complete computer control of TS-950
KENCON.ZIP Kenwood 440 comp cntrl. Great for handicap
KENWOOD.ZIP Kenwood radio control program
KENWOODC.ZIP
KEN_MODS.ZIP Various modifications for Kenwood

KMIJ3_11.ZIP
KNWDMOD.ZIP Official list of Kenwood mods
KNWDSTUF.ZIP
MODS.ZIP Mods for Kenwood, Yaesu & Icom radios
R-5000.ZIP Kenwood mods for R-5000
RADMOD.ZIP Mods for Kenwood and Icom radios.
RIG-EQF1.ZIP Computer control for most Kenwood radios
RIGEQF.ZIP Control Kenwood rigs via computer
RIG_EQF.ZIP Front end program for the Kenwood computer interface
TH28-48.ZIP TH-228 and TH-48 Secret Functions Manual by PE1ACG
TH77AMOD.TXT Modifications for Kenwood TH77a dual band handheld.
TH78E.LZH Secret kenwood functions by FC1JS0
TM732A.MOD Modifications for the Kenwood TM-732a
TM741A.ZIP Modifications for Kenwood TM741A
TS-440S.ZIP Controller program for TS-440S
TS-50QRP.LZH Reduce Kenwood TS-50 power to QRP standards by WA6ERB
TS140S-1.TXT
TS140S-2.TXT
TS140S-3.TXT
TS2400.TXT
TS430-1.TXT
TS430S-2.TXT
TS430S-3.TXT
TS430S-4.TXT
TS430S-5.TXT
TS430S-6.TXT
TS440.TXT
TS440S-1.TXT
TS440S-2.TXT
TS440S-3.TXT
TS440S-4.TXT
TS440S-5.TXT
TS440S-6.TXT
TS440S-7.TXT
TS440S-8.TXT
TS440S-9.TXT
TS440S-A.TXT
TS440S-B.TXT
TS440S-C.TXT
TS440S-D.TXT
TS440S-E.TXT
TS440S-F.TXT
TS440S-G.TXT
TS50XMT.MOD All band transmit modification for TS-50 mobile HF transceiver.
TS530.TXT
TS680-1.TXT
TS680-2.TXT
TS680.TXT

TS690PAK.LZH
TS711.TXT
TS790-1.TXT
TS790-2.TXT
TS790.TXT
TS820.TXT
TS830-1.TXT
TS830-2.TXT
TS830.TXT
TS830S.TXT
TS850.ZIP Several Modifications, including all band TX MOD. for KENWOOD TS
850 HF Radio.
TS850KAM.LZH
TS930-1.TXT
TS930-2.TXT
TS930.TXT
TS940-1.TXT
TS940-2.TXT
TS940-3.TXT
TS940-4.TXT
TS940-5.TXT
TS940-6.TXT
TS940-7.TXT
TS940-8.TXT
TS940-9.TXT
TS940.TXT
TS_850S.ZIP Computer control of the Kenwood TS-850S
VFOTRAK.ZIP Amateur Radio: Lock VFO B T VFO A on Kenwood radios

Date: Mon, 24 Jan 94 16:54:17 CST
From: ucsnews!sol.ctr.columbia.edu!howland.reston.ans.net!spool.mu.edu!
news.clark.edu!netnews.nwnet.net!ns1.nodak.edu!news.uoknor.edu!
chris%uoknor.edu@network.ucsd.edu
Subject: Novice/Tech test maker?
To: info-hams@ucsd.edu

I'm looking for a program to make up tests for the no-code tech test
(novice + tech q-pool) to run on an IBM clone.

Autoexam does this, but the only version I've found (SIMTEL mirrors)
still has the old question pool. I HAVE the new question pool as text,
but it is no simple matter fudging it for Autoexam.

Oh, yeah, I need it in about 2 hours! Well, I can give it to the students
next week, but I'd like to have it for tonight.

Thanks,

Jud

(This file must be converted with BinHex 4.0)

:#Ne*6P9&9#j658F!58*02dP#66m!N!3"Y3#3",D')!d++bf34#X0#R`J5R9N)%&
SCA*Z)%Y\$09**)*!05@jdCA*ZCA3k)'TKD'9bEN"RC@pSG@)ZCf0Z,R9[Dfj[FLj
PC(8JI!d+I#"(C@pXEfGj)#BJ4f9[F'KjFfPMFb#3#%*TG'jPG\$SJDQ&SCA*Z3(9
[DfGMELjLDA4ZCA3JN!Ym\$3Tm)&9ZDACPFR0TG(NJEfBJ6fYXB@K[E@%J)#*2F'P
ZD@pZFb"PH("bCA0cC@3JD'9bC5"bC@CXC@0d)(4SC5"PER4TFQ9m\$3Tm)%j[FQe
KEL`J6dXJ)\$Fc-\$%j)*!)9@jTGQ9bFfPdH5`JD@iJEfjP)'0[ERCPEQPPER3JE'p
MBA4TEfiZ)L!JI!d++bf34#X0#Jd+%ld!!!!:

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+-----+
| Jud Ahern KC5RI           Internet: jahern@geohub.gcn.uoknor.edu |
| Geology & Geophysics      Bitnet: jahern@uokgcn.bitnet          |
| University of Oklahoma    "Opinions expressed here reflect the entire|
| Norman, OK 73019          University, in one convenient location." |
+-----+
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Date: 24 Jan 94 09:43:30 GMT
From: netcomsv!netcomsv!cruzio!comix!jeffl@decwrl.dec.com
Subject: RAMSEY FX TRANSCEIVER
To: info-hams@ucsd.edu

In article <9401230124.A9637wk@support.com> steven.rosenberg@support.com writes:
>If this is the case, shouldn't Ramsay's ads lead off with the following
>words in big letters:
>DO NOT USE THIS AS YOUR PRIMARY RADIO. ONLY PURCHASE THIS KIT IF YOU
>PRIZE THE THRILL OF CONSTRUCTION FAR ABOVE ANY PRACTICAL USE OF SAID
>EQUIPMENT.
>On the contrary, I think Ramsay is trying to push these kits to people
>who "can't afford" a pre-made Japanese radio. And that is a travesty.
>Steven Rosenberg, KC6FYL

Heh-heh. I doubt that the thrill of construction would be attempted unless one were reasonably certain of the outcome. One of the major problems with the current crop of kit manufacturers is that they do NOT offer an assembled and tested version as Heathkit did. I'm sure every customer wonders whether the kit has something wrong that would make the sale of the assembled unit difficult. The answer is that the typical current product is machine assembled and that the technology of the human assembled kits and the machine assembled Japanese radios are radically different. Pretend that you were given all the parts, pieces, and docs necessary to assemble your favorite mobile radio. Lots of surface mount parts, miniature connectors, flex boards,

fragile LCD displays, and sub-min screws. I could probably assemble it (because I've built products as bad), but suspect that the average ham would find it impossible. So the kit manufacturer uses technology where the builder has at least a chance of success.

There was also some question of the type of test equipment required. If you know what you're doing, nothing more than a watts-guesser, voltmeter, oscilloscope, and another radio is needed. Most of the tuned circuits can be peaked instead of swept. A known weak on the air signal will suffice for the receiver. A scanner with a discriminator output can be used to set the transmitter frequency. The discriminator audio (not the speaker audio) from the scanner can be used to set the tx deviation against a known transmitter. A sweep generator, spectrum analyzer, and a service monitor are nice, but not necessary.

Where I see the Ramsey kits are from builders that want me to either "clean it up" or "make it work". Usually the problem is creative assembly, sloppy soldering, or mechanical (case) problems. I've helped out with 3 vhf kits and know about 2 others.

There is an interesting difference between the builders and what we used to call the "appliance operators". Every once in a while, I drag my Cushman CE-6 service monitor to the repeater site and call out tx frequency and deviation for everyone checking into the local net. I've noticed that the builders tend to take my numbers seriously while the others pretend that there is no problem. (I have a standing offer to set the mic gain, deviation, and tx frequency on anything a club member can drag into the office.) An amazing number of operators literally don't care what they sound like on the air and expect everyone to tolerate their over-deviation, buzz, alternator whine, and distortion. Yech.

--

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End of Info-Hams Digest V94 #77

